

We claim:

1. An implantable access device comprising a port for receiving and guiding a filament into an entry region of the implantable device, the port including:

a plate for receiving a filament, the plate having opposing first and second ends; and

at least two walls extending upwardly from the plate, the walls each having opposing first and second edges, with the second edges defining an entry region for a filament at the second end of the plate, the first edges extending towards the first end of the plate, and a distance between the walls decreasing monotonically between the first and the second edges of the walls.

2. A device according to claim 1, wherein a greatest distance between the walls is at least five times greater than a greatest height of the walls.

3. A device according to claim 2, wherein a greatest distance between the first and the second ends of the plate is at least five times greater than the greatest height of the walls.

4. A device according to claim 1, wherein the second end of the plate is pointed and the entry region between the walls corresponds with a tip of the second end furthest from the first end of the plate.

5. A device according to claim 4, wherein the port includes a central longitudinal axis extending through the first and the second ends of the plate and the point of the second end of the plate is aligned with the axis.

6. A device according to claim 1, wherein the walls of the port extend perpendicular from the plate.

7. A device according to claim 1, wherein the plate of the port is substantially flat.

8. A device according to claim 1, wherein the at least two walls comprise end walls, the plate includes sides extending between the ends of the plate, and the port further includes opposing side walls extending from the sides of the plate and between the first end of the plate and the end walls.

9. A device according to claim 8, wherein the side walls of the port extend perpendicular from the plate.

10. A device according to claim 8, wherein a distance between the opposing side walls decreases monotonically between the first end of the plate and the end walls.

11. A device according to claim 8, wherein the port includes a central axis extending through the first and the second ends of the plate and the side walls include first portions extending from the first end of the plate to second portions extending from the first portions to the end walls, and wherein the first portions extend outwardly at an angle with respect to the axis and the second portions extend inwardly at an angle with respect to the axis.

12. A device according to claim 1, wherein the port further includes a cover extending over the walls.

13. A device according to claim 12, wherein the cover includes a slot aligned with the entry region between the walls.

14. A device according to claim 1, wherein the port further includes at least one wing extending outwardly from the port and adapted to receive a fastener for fastening the port to tissue of a patient.

15. A device according to claim 1, further comprising a valve assembly disposed adjacent the entry region of the port, the valve assembly being normally closed and adapted to be opened by a filament guided through the entry region by the walls of the port.

16. A device according to claim 1, wherein the port is made from a material comprising at least one of titanium, stainless steel and ceramic.

17. An implantable access device comprising a port for receiving and guiding a filament into an entry region of the implantable device, the port including:

a plate for receiving a filament, the plate having opposing first and second ends; and

5 at least two walls extending upwardly from the plate, the walls shaped and positioned to guide the filament moving between the first end and the second end of the plate towards an entry region defined between the walls and located substantially at the second end of the plate.

18. A device according to claim 17, wherein a greatest distance between the walls is at least five times greater than a greatest height of the walls.

19. A device according to claim 17, wherein a greatest distance between the first and the second ends of the plate is at least five times greater than a greatest height of the walls.

20. A device according to claim 17, wherein the walls of the port extend perpendicular from the plate.

21. A device according to claim 17, wherein the plate of the port is substantially flat.

22. A device according to claim 17, wherein:

the at least two walls comprise end walls;

the plate includes sides extending between the ends of the plate; and

5 the port further includes opposing side walls extending from the sides of the plate and between the first end of the plate and the end walls, and wherein the side walls are shaped and positioned to guide the filament moving between the first end and the second end of the plate towards the end walls.

23. A device according to claim 22, wherein the side walls of the port extend perpendicular from the plate.

24. A device according to claim 17, wherein the port further includes a cover extending over the walls.

25. A device according to claim 24, wherein the cover includes a slot aligned with the entry region between the walls.

26. A device according to claim 17, wherein the port further includes at least one wing extending outwardly from the port and adapted to receive a fastener for fastening the port to tissue of a patient.

27. A device according to claim 17, further comprising a valve assembly disposed adjacent the entry region of the port, the valve assembly being normally closed and adapted to be opened by a filament guided through the entry region by the walls of the port.

28. A device according to claim 17, wherein the port is made from a material comprising at least one of titanium, stainless steel and a ceramic.

29. An implantable access device comprising:  
a port for receiving a filament and guiding the filament through an entry region of the port, wherein at least one of a greatest width and a greatest length of the port is at least five times greater than a height of the port; and  
5 a valve assembly disposed adjacent the entry region of the port, the valve assembly being normally closed and adapted to be opened by a filament guided through the entry region of the port.

30. An implantable access device according to claim 29, wherein the greatest width of the port is at least five times greater than the height of the port.